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The John B. Pierce Laboratory

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Center for Research in Heelth and the Environment

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203.562.9901 203.624.4950 fax

March 14, 1996

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re:

Ex Parte Presentation Concerning ET Docket No. 93-62 (Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation)

Dear Mr. Caton:

Please include the attached letter in the record of the above referenced proceeding. Please address any questions concerning this submission to the undersigned.

Sincerely,

Eleanor R. Adair, Ph.D.

Fellow

Senior Research Scientist, Yale University

Attachment

cc: Chairman Reed E. Hundt Commissioner James H. Quello Commissioner Andrew C. Barrett Commissioner Susan Ness Commissioner Rachelle B. Chong Richard M. Smith, Chief, OET

The John B. Pierce Laboratory

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March 14, 1996

Honorable Reed E. Hundt Chairman Federal Communications Commission 1919 M Street, NW, Room 814 Washington, DC 20554



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203.<mark>56</mark>2.9901 203.624.4950 fax

Re:

Ex Parte Presentation Concerning ET Docket No. 93-62 (Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation)

Dear Mr. Chairman:

I am greatly disturbed by news that the FCC intends to adopt all or part of the 1986 NCRP Report "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields", instead of the ANSI/IEEE C95.1-1992 Standard as proposed in the Docket referenced above. As an Advisor to NCRP Scientific Committee 53, I contributed Section 15 to the 1986 NCRP Report No. 86; had I been consulted during development of Section 17, Exposure Criteria, I would have opposed the criteria vigorously on scientific and technical grounds. I currently serve on the newly-formed NCRP Scientific Committee 89-5, charged with revision of the 1986 Report, and can already assure you that this revision will in no way resemble its 1986 predecessor. The exposure criteria will, in fact, closely reflect the more up-to-date ANSI/IEEE C95.1-1992 Standard developed by IEEE SCC28, Subcommittee 4, of which I served as Co-Chairman until late 1995. Also, until recently, all interpretations of the ANSI/IEEE standard were prepared by a SC-4 working group under my Chairmanship. My present role in IEEE standards development is Vice-Chairman of IEEE SCC28.

The NCRP Report No. 86 is not a standard; it is a review of the literature through 1982. The final section contains recommended exposure criteria (based on the ANSI 1982 Standard) that were produced by the 6 committee members working alone. These criteria were criticised at the time the draft report was circulated for review. Today, the Chairman of that committee, A.W.Guy, states that the exposure criteria are obsolete. For example, skin burns can occur at millimeter wave frequencies because of the long averaging time, even though the power density permitted is lower than C95.1; no protective limits on induced and contact currents at low frequencies are provided; and special limits against exposure to modulated fields, based on flimsy evidence, are incorporated in NCRP that appear in no other exposure guideline worldwide. Further, no documentation or instruction on methods for implementing the criteria are

Hon. Reed E. Hundt - Page 2

provided. It is no surprise to me that the exposure criteria in NCRP Report No. 86 have never been adopted by any other agency or entity. In my view, it would be a serious mistake if the FCC should do so now.

It is unfortunate that, in the mid-1980s, the U.S. Environmental Protection Agency did not carry through its mandate to generate protective guidance for human exposure to radiofrequency energy. The EPA generated an excellent review of the literature, received voluminous comments to proposed exposure levels published in the Federal Register, and then resigned. The 9 years required for revision of the 1982 ANSI Standard by SC-4 attest to the difficulty of the task of building a science-based consensus exposure standard, but prove it can be done. The resulting IEEE C95.1-1991 Standard, adopted by ANSI in 1992, has also already been adopted by DoE, OSHA, DoD, FDA and other agencies as well as several states, counties, communities, and companies in the United States. This living document, backed by ANSI and the IEEE Standards Board, is continually being interpreted, supplemented, and revised by a large group of scientific and medical experts. Were the FCC to adopt the NCRP 1986 exposure criteria in toto, or create some patchwork hybrid of NCRP and ANSI/IEEE C95.1-1992, utter confusion would result. Who would instruct the users in instrumentation and methodology? Who would interpret unclear sections of the guidelines for the user? Which standard would take precedence, the one already approved by an agency such as the FDA or the new FCC choice? The problems created by such a decision would be enormous.

Based on the information above and my considerable experience in the development of RF exposure guidance for both NCRP and ANSI/IEEE, I urge the FCC to conclude the adoption of the ANSI/IEEE C95.1-1992 Standard as proposed in the 1993 NPRM, presented in ET Docket No. 93-62. That proposed adoption has been overwhelmingly endorsed in comments submitted to the FCC over the last 3 years. Only if the FCC believes there are compelling scientific reasons for doing otherwise, a new NPRM to that effect should be issued that contains details of the new guidance proposed for adoption and sufficient time should be allowed for comments. This decision is far too important to many organizations, agencies and industries for the FCC to ignore the consequences of a convenient or political decision and its impact on public health and safety.

Respectfully Submitted,

Eleanor R. Adair, Ph.D.

cc: Commissioner James H. Quello Commissioner Andrew C. Barrett Commissioner Susan Ness Commissioner Rachelle B. Chong

Richard M. Smith, Chief, OET